

## **APPENDIX A**

No. \_\_\_\_\_

# FLOODPLAIN DEVELOPMENT PERMIT

Specify for what purpose the permit is issued -  
New construction, alterations, fill, excavation, other  
(circle one)

**ISSUED TO:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**PROJECT ADDRESS:** \_\_\_\_\_  
(if different from permittee's address)

**ISSUED BY:** \_\_\_\_\_  
Floodplain Management Administrator

**DATE:** \_\_\_\_\_  
(This permit expires 180 days from this date)

THIS PERMIT MUST BE POSTED ON THE PREMISES IN A CONSPICUOUS PLACE SO AS TO BE  
CLEARLY VISIBLE FROM THE STREET.

U.S. DEPARTMENT OF HOMELAND SECURITY  
Federal Emergency Management Agency  
National Flood Insurance Program

## ELEVATION CERTIFICATE

OMB No. 1660-0008  
Expires February 28, 2009

Important: Read the instructions on pages 1-8.

SECTION A - PROPERTY INFORMATION			For Insurance Company Use:
A1. Building Owner's Name			Policy Number
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.			Company NAIC Number
City	State	ZIP Code	
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)			
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) _____			
A5. Latitude/Longitude: Lat. _____ Long. _____		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983	
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.			
A7. Building Diagram Number _____			
A8. For a building with a crawl space or enclosure(s), provide		A9. For a building with an attached garage, provide:	
a) Square footage of crawl space or enclosure(s) _____ sq ft	a) Square footage of attached garage _____ sq ft		
b) No. of permanent flood openings in the crawl space or enclosure(s) walls within 1.0 foot above adjacent grade _____	b) No. of permanent flood openings in the attached garage walls within 1.0 foot above adjacent grade _____		
c) Total net area of flood openings in A8.b _____ sq in	c) Total net area of flood openings in A9.b _____ sq in		

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number		B2. County Name		B3. State	
B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use base flood depth)
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9. <input type="checkbox"/> FIS Profile <input type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other (Describe) _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other (Describe) _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input type="checkbox"/> No Designation Date _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input type="checkbox"/> Finished Construction *A new Elevation Certificate will be required when construction of the building is complete.	
C2. Elevations – Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-g below according to the building diagram specified in Item A7. Benchmark Utilized _____ Vertical Datum _____ Conversion/Comments _____	
Check the measurement used.	
a) Top of bottom floor (including basement, crawl space, or enclosure floor) _____	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
b) Top of the next higher floor _____	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
c) Bottom of the lowest horizontal structural member (V Zones only) _____	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
d) Attached garage (top of slab) _____	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment in Comments) _____	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
f) Lowest adjacent (finished) grade (LAG) _____	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)
g) Highest adjacent (finished) grade (HAG) _____	<input type="checkbox"/> feet <input type="checkbox"/> meters (Puerto Rico only)

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION	
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.	
<input type="checkbox"/> Check here if comments are provided on back of form.	
Certifier's Name	License Number
Title	Company Name
Address	City State ZIP Code
Signature	Date Telephone

PLACE  
SEAL  
HERE

<b>IMPORTANT: In these spaces, copy the corresponding information from Section A.</b>		For Insurance Company Use:	
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.		Policy Number	
City	State	Company NAIC Number	

**SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)**

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments

  
  

Signature \_\_\_\_\_
Date \_\_\_\_\_

☐ Check here if attachments

**SECTION E - BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)**

For Zones AO and A (without BFE), complete Items E1-E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1-E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).

a) Top of bottom floor (including basement, crawl space, or enclosure) is \_\_\_\_\_ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

b) Top of bottom floor (including basement, crawl space, or enclosure) is \_\_\_\_\_ ☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6-8 with permanent flood openings provided in Section A Items 8 and/or 9 (see page 8 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is \_\_\_\_\_ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is \_\_\_\_\_ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is \_\_\_\_\_ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

**SECTION F - PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION**

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. *The statements in Sections A, B, and E are correct to the best of my knowledge.*

Property Owner's or Owner's Authorized Representative's Name \_\_\_\_\_

Address	City	State	ZIP Code
Signature	Date	Telephone	

Comments \_\_\_\_\_

☐ Check here if attachments

**SECTION G - COMMUNITY INFORMATION (OPTIONAL)**

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8. and G9.

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4.-G9.) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of Compliance/Occupancy Issued
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G7. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: \_\_\_\_\_ ☐ feet ☐ meters (PR) Datum \_\_\_\_\_

G9. BFE or (in Zone AO) depth of flooding at the building site: \_\_\_\_\_ ☐ feet ☐ meters (PR) Datum \_\_\_\_\_

Local Official's Name	Title
Community Name	Telephone
Signature	Date

Comments \_\_\_\_\_

☐ Check here if attachments

FEMA Form 81-31, February 2006

Replaces all previous editions

## Building Photographs

See Instructions for Item A6.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.			For Insurance Company Use:
			Policy Number
City	State	ZIP Code	Company NAIC Number
If using the Elevation Certificate to obtain NFIP flood insurance, affix at least two building photographs below according to the instructions for Item A6. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." If submitting more photographs than will fit on this page, use the Continuation Page, following.			

## Building Photographs

Continuation Page

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.			For Insurance Company Use:
City                      State                      ZIP Code			Policy Number
			Company NAIC Number
<p>If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View."</p>			

<b>V-Zone Certification</b>				
<b>Property Information</b>			<b>For Insurance Company Use</b>	
Name of Building Owner			Policy Number	
Building Address or Other Description				
City			State	Zip Code
<b>SECTION I: FLOOD INSURANCE RATE MAP (FIRM) INFORMATION</b>				
<i>Note: to be obtained from appropriate FIRMs</i>				
Community Number	Panel Number	Suffix	Date of FIRM Index	FIRM Zone
<b>SECTION II: ELEVATION INFORMATION</b>				
<i>Note: This form is not a substitute for an Elevation Certificate. Elevations should be rounded to nearest tenth of a foot.</i>				
1. Elevation of the Bottom of Lowest Horizontal Structure Member .....			feet	
2. Base Flood Elevation .....			feet	
3. Elevation of Lowest Adjacent Grade .....			feet	
4. Approximate Depth of Anticipated Scour/Erosion Used for Foundation Design .....			feet	
5. Embedment Depth of Pilings or Foundation Below Lowest Adjacent Grade .....			feet	
6. Datum Used: _____ NGVD '29 _____ NAVD '88 _____ Other _____				
<b>SECTION III: FLOOD INSURANCE RATE MAP (FIRM) INFORMATION</b>				
<i>Note: This section must be certified by a registered professional engineer or architect</i>				
I certify that I have developed or reviewed the structural design, plans and specifications for construction and that the methods of construction to be used are in accordance with accepted standards of practice for meeting the following provisions:				
a) The bottom of the lowest horizontal structure member of the lowest floor (excluding the pilings or columns) is elevated to or above the BFE; and,				
b) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of the wind and water loads acting simultaneously on all building components. Water loading values used are those associated with the base flood including wave action. Wind loading values used are those required by the applicable State or local building code. The potential for scour and erosion at the foundation has been anticipated for conditions associated with the flood, including wave action.				
<b>SECTION IV: FLOOD INSURANCE RATE MAP (FIRM) INFORMATION</b>				
<i>Note: This section must be certified by a registered professional engineer or architect</i>				
I certify that I have developed or reviewed the structural design, plans and specifications for construction and that the design and methods of construction to be used for the breakaway walls are in accordance with accepted standards of practice for meeting the following provisions:				
c) Breakaway collapse shall result from water load less than that which would occur during the base flood; and,				
d) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (wind and water loading values defined in Section III)..				
<b>SECTION V: CERTIFICATION</b>				
(Check: Section III _____ and/or Section IV _____)				
Name of Certifier			Title	
Firm Name			License Number	
Street Address			Phone Number ( )	
City			State	Zip Code
Signature			Date	

Figure 5-18: Sample V Zone certification

**NOTE**

The V-zone certificate is not a substitute for and can not be used without the NFIP Elevation Certificate (see Fact Sheet No. 4), which is required for flood insurance rating.

## Checklist for Permit Review

### General

- ☐ Structural systems resistant to flotation, collapse, or permanent lateral loading
- ☐ DFE consistent with the site's location on the applicable FIRM
- ☐ Mechanical and electrical systems elevated to at or above the DFE
- ☐ Water and sewer designed to allow minimum infiltration from flood waters, or prevent it entirely
- ☐ Materials below the DFE are resistant to prolonged water exposure
- ☐ All areas below the DFE are designed for a use consistent with NFIP regulations
- ☐ Site drainage that will reduce exposure to flooding
- ☐ Foundation designed to resist erosion and scour
- ☐ Submitted appropriate geotechnical (soils) information
- ☐ Floor framing perpendicular to wave action
- ☐ Corrosion-resistant exterior connections
- ☐ Proper splices for long girders
- ☐ Verification of the wind exposure classification
- ☐ Key connections in place to allow a continuous load path
  - ☐ Uplift resistant connection to transfer loads from main floor to foundation
  - ☐ Upper walls transfer loads to lower walls, bypassing floors
  - ☐ Roof loads transferred to walls
  - ☐ Sufficient roof system and roof framing to resist uplift
- ☐ Shear walls properly specified materials and fastened properly
- ☐ Openings in the shear walls designed so as to not compromise their strength



- ☐ Appropriate roofing system specified given wind speed requirements
- ☐ If CMU construction is specified, it is appropriately reinforced and roof elements properly connected
- ☐ Flashing roof/window sufficient for wind-driven rain.

**Seismic**

- ☐ Connection sufficient to resist applicable lateral loads
- ☐ Roofing system seismic-resistant and included in loading calculations

**A-Zone**

- ☐ Crawlspace equipped with flood openings 1 inch 2 per 1 square foot of area
- ☐ Stem walls properly backfilled and compacted
- ☐ Foundation walls are solid foundation walls
- ☐ Pier foundation sufficiently designed for overturning, due to wind, flood, erosion, scour, and seismic loads
- ☐ Pile foundation adequately detailed, including: size, installation method, embedment depth, bracing and proper connection to the structure. (Is it resistant to vertical and horizontal loading? Are any diagonal piles required?)
- ☐ Fill is properly stabilized, sloped, and compacted
- ☐ Breakaway walls utilized reflect design sufficient to resist 10 psf of force, but not to exceed 20 psf
- ☐ Any ramps and stairways designed to resist flood-related loads and (in the event design flood conditions are met) will break away without causing damage to the main structure
- ☐ Any garages evaluated against requirements of ASCE 24 Section 9.3
- ☐ Any chimneys or fireplaces evaluated against requirements of ASCE 24 Section 9.4
- ☐ Any swimming pools evaluated against the requirements of ASCE 24 Section 9.5

**V-Zone**

- ☐ Pier foundation sufficiently designed for overturning, due to wind, flood, erosion, scour, and seismic loads
- ☐ Pile foundation adequately detailed, including: size, installation method, embedment depth, bracing, and proper connection to the structure. Pile foundation evaluated for resistance to vertical and horizontal loading. (Are any diagonal piles required?)
- ☐ Breakaway walls utilized reflect design sufficient to resist 10 psf of force, but not to exceed 20 psf
- ☐ Are any ramps and stairways designed to resist flood-related loads and (in the event design flood conditions are met) will break away without causing damage to the main structure
- ☐ Garages meet requirements of ASCE 24 Section 9.3
- ☐ Chimneys and fireplaces meet requirements of ASCE 24 Section 9.4
- ☐ Swimming pools meet requirements of ASCE 24 Section 9.5

**Roofing**

- ☐ Plans explain proposed installation techniques and cover whether materials are corrosion-resistant, and whether any dissimilar metals are in contact with each other
- ☐ Review of substitutions to the manufacturer's specifications about the roof system

**Exterior Cladding**

- ☐ Connections suitable for hazards and resistant to water intrusion

**Doors and Windows**

- ☐ Doors and windows meet wind load requirements, including any appropriate missile-impact requirements
- ☐ All connections and materials corrosion-resistant
- ☐ Locations consistent with shear wall requirements. (Substitutions for larger openings cannot be made without consent of the engineer)

**Utilities**

- ☐ All utilities properly elevated to at or above the DFE
- ☐ All utilities properly attached and anchored to their supports

**SAMPLE**

Application #: \_\_\_\_\_

Applicant: \_\_\_\_\_

**Plan Review Checklist****FLOOD HAZARD AREA APPLICATION REVIEW – V ZONES**

Terms: FHA = Flood Hazard Area; DFE = Design Flood Elevation

Reviewer's Initials and Date of Review	Review Steps <i>NOTE: For variance requests, use this form to document efforts to achieve the greatest degree of compliance.</i>
	Is proposed development consistent with zoning? <input type="checkbox"/> NO. Applicant to request a zoning amendment. <input type="checkbox"/> YES. Proceed with review.
	Is proposal in Coastal Barrier Resources Area (CoBRA) or Otherwise Protected Area? <input type="checkbox"/> NO, continue review. <input type="checkbox"/> YES, advise applicant that flood insurance is not available, document to file, continue review (must comply with flood provisions).
FIRM Panel # and date _____  DFE _____	Check FIRM, floodplain and zone boundaries, base flood elevations, <u>and</u> map revisions or LOMRs issued by FEMA. Is proposal in the Coastal Flood Hazard Area subject to high velocity wave action (V Zone)? <input type="checkbox"/> NO, not in Flood Hazard Area; sign and date this form and put in file. <input type="checkbox"/> NO, in "Coastal A Zone" (apply V Zone requirements). <input type="checkbox"/> NO, in riverine A Zone. Use A Zone checklist. <input type="checkbox"/> YES, in V Zone, must meet flood resistant provisions of the code.
	Site plan shows development proposal, location, dimensions, wetlands, FHA /V Zone boundaries, DFE, and ground elevations (NGVD or other datum on FIRM). <input type="checkbox"/> YES, continue review. <input type="checkbox"/> NO, return to applicant to revise application and site plan.
	Can the proposed development be modified to avoid FHA /V Zone? <input type="checkbox"/> YES. Explain flood hazards to applicant and make recommendations to minimize flood hazards and damage potential. <input type="checkbox"/> NO. Can floodplain impacts be further minimized? Maximize setback from the water? Buildings moved to higher elevation?
	Has the applicant obtained and provided copies of all necessary State and federal permits, e.g., wetlands, coastal zone consistency? <input type="checkbox"/> NO, advise applicant which agencies to contact. <input type="checkbox"/> YES, require copies in the file.
	Will a dune be altered? <input type="checkbox"/> NO, continue review. <input type="checkbox"/> YES. Require State coastal zone approval before continuing.
	Is a pool proposed? <input type="checkbox"/> NO. Continue review. <input type="checkbox"/> YES, not attached to the building; continue review. <input type="checkbox"/> YES, attached to the building. Continue review only if included in foundation design.

# SAMPLE

Permit #: \_\_\_\_\_

Date: \_\_\_\_\_

Applicant: \_\_\_\_\_

## Inspection Checklist

### FLOOD HAZARD AREA INSPECTIONS – V ZONES

Inspector's Initials and Date of Inspection	Inspection Steps
	Before site inspection: <input type="checkbox"/> REVIEW permit file before going in the field. <input type="checkbox"/> ASK permit reviewer questions to understand requirements. <input type="checkbox"/> Are other State and federal permits in the file?
	Measure distances from landmark. Is development in the right place? <input type="checkbox"/> NO. Take enforcement action to correct problems. <input type="checkbox"/> YES. Continue inspection.
	Elevation of lowest floor checked during framing or foundation inspection after lowest floor is in place. Elevations checked and acceptable? <input type="checkbox"/> YES. <input type="checkbox"/> NO! Take enforcement action to correct problems.
	For enclosures below DFE: Are walls insect screening or lattice? Are walls breakaway, and no utilities attached to or penetrate breakaway walls? Are flood damage resistant materials used? Does use of enclosure appear to be limited to parking, building access, or limited storage? <input type="checkbox"/> YES. <input type="checkbox"/> Building does not have enclosures. <input type="checkbox"/> NO! Take enforcement action to correct problems.
	Other Notes Based on Inspection:
	Issue Occupancy Certificate only if final inspection shows compliance with floodplain requirements.

FINAL INSPECTION COMPLETED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

**SAMPLE**

Application #: \_\_\_\_\_

Applicant: \_\_\_\_\_

**Plan Review Checklist****FLOOD HAZARD AREA APPLICATION REVIEW – A ZONES**

Terms: FHA = Flood Hazard Area; DFE = Design Flood Elevation

Reviewer's Initials and Date of Review	Review Steps
	<p><i>NOTE: For variance requests, use this form to document efforts to achieve the greatest degree of compliance.</i></p> <p>Is proposed development consistent with zoning?</p> <p><input type="checkbox"/> NO. Applicant to request a zoning amendment.</p> <p><input type="checkbox"/> YES. Proceed with review.</p>
<p>FIRM Panel # and date</p> <p>_____</p> <p>FLOODWAY Panel # and date</p> <p>_____</p> <p>DFE</p> <p>_____</p>	<p>Check FIRM, floodplain/floodway boundaries, base flood elevations, <u>and</u> map revisions and LOMRs issued by FEMA. Is proposal in the floodplain and/or floodway?</p> <p><input type="checkbox"/> NO. Sign and date this form and put in file.</p> <p><input type="checkbox"/> YES. Must meet the flood resistant provisions of the code.</p> <p><input type="checkbox"/> YES, FLOODWAY. All residential structures (including Manufactured Housing units) in floodways to comply with IBC®.</p> <p><input type="checkbox"/> YES, FLOODWAY. Require engineer's "no rise" analysis and supporting hydraulic data in file before continuing review.</p> <p><input type="checkbox"/> YES, in FHA without DFEs. Check other sources, use estimating methods, or require applicant to determine.</p> <p><input type="checkbox"/> YES, in FHA, but applicant has elevation data that shows natural site elevation above DFE. Advise applicant to obtain LOMA and submit copy for the file.</p> <p><input type="checkbox"/> YES, in Coastal A Zone; refer to V Zone Checklist if V Zone requirements are applied.</p> <p><input type="checkbox"/> YES, in 500-year floodplain. Floodplain review not required; flood-resistance encouraged.</p>
	<p>Site plan shows nature of development proposal, location, dimensions, wetlands, floodplain/floodway boundaries, and ground elevations.</p> <p><input type="checkbox"/> YES, continue review.</p> <p><input type="checkbox"/> NO, return to applicant to revise application and site plan.</p>
	<p>Can the proposed development be modified to avoid floodplain?</p> <p><input type="checkbox"/> YES. Explain flood hazards to applicant and make recommendations to minimize flood hazards and damage potential.</p> <p><input type="checkbox"/> NO, but can impacts be further minimized? Can fill be minimized? Buildings moved to higher ground?</p>
	<p>Has the applicant obtained and provided copies of all necessary State and federal permits, e.g., wetlands?</p> <p><input type="checkbox"/> NO, advise applicant which agencies to contact.</p> <p><input type="checkbox"/> YES, require copies for the file.</p>
	<p>Will a watercourse be altered?</p> <p><input type="checkbox"/> NO. Continue review.</p> <p><input type="checkbox"/> YES. Applicant to provide copies of notices to adjacent communities, federal agencies, and the NFIP State Coordinator.</p> <p><input type="checkbox"/> YES. Engineer's analysis required to show same flood carrying capacity; method of maintenance specified.</p>
	<p>Is fill proposed? Will fill be compacted? Side-slopes are no steeper than 2:1? Protected from erosion?</p> <p><input type="checkbox"/> NO fill. Continue review.</p> <p><input type="checkbox"/> YES, fill used to elevate building will be compacted, sloped, and stabilized.</p> <p><input type="checkbox"/> YES, but not for building elevation. Purpose for fill: _____</p>

# SAMPLE

Permit #: \_\_\_\_\_

Date: \_\_\_\_\_

Applicant: \_\_\_\_\_

## Inspection Checklist

### FLOOD HAZARD AREA INSPECTIONS – A ZONES

Inspector's Initials and Date of Inspection	Inspection Steps
	Before site inspection: <input type="checkbox"/> REVIEW permit file before going in the field. <input type="checkbox"/> ASK permit reviewer questions to understand requirements. <input type="checkbox"/> Are other State and federal permits in the file?
	Measure stake out distances from waterway or landmark. Is development in the right place? Is fill correct distance from waterway or landmark? <input type="checkbox"/> NO. Take enforcement action to correct problems. <input type="checkbox"/> YES. Check fill compaction and side slopes. Basements into fill not allowed.
	Elevation of lowest floor checked during framing or foundation inspection after lowest floor is in place. Elevations checked and acceptable? <input type="checkbox"/> YES. <input type="checkbox"/> NO! Take enforcement action to correct problems.
	For enclosures below DFE (including crawl spaces): Are flood damage resistant materials used? Does use of enclosure appear to be limited to crawl space, parking, building access, or limited storage? Are flood openings no more than 12" above grade? Are there enough flood openings (based on total net open area), are they on at least two sides, and do they allow automatic entry/exit of floodwater? <input type="checkbox"/> YES. <input type="checkbox"/> Building does not have enclosures below DFE. <input type="checkbox"/> NO! Take enforcement action to correct problems.
	Other Notes Based on Inspection:
	Issue Occupancy Certificate only if final inspection shows compliance with floodplain requirements.

FINAL INSPECTION COMPLETED BY: \_\_\_\_\_ DATE: \_\_\_\_\_